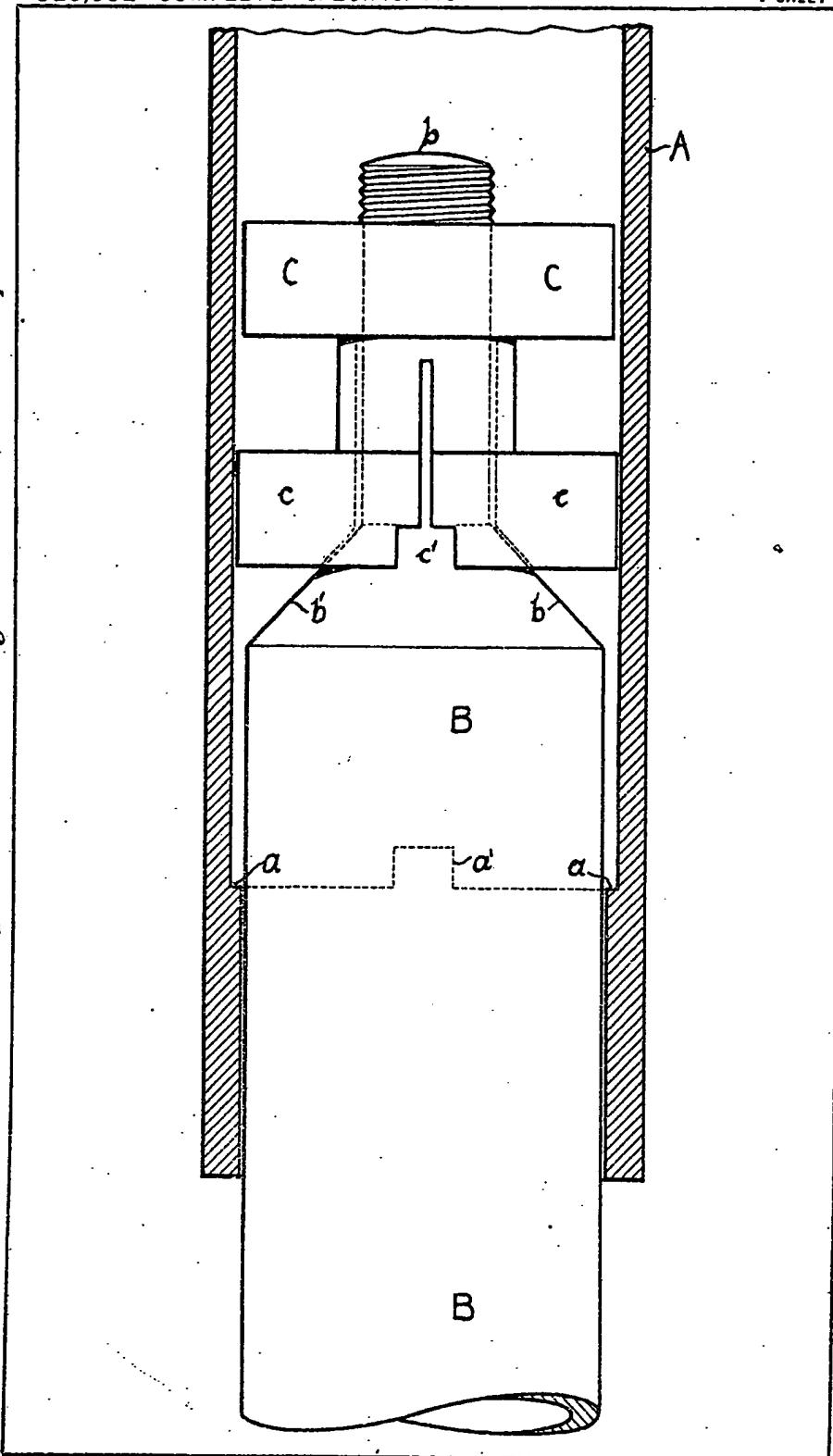


*This Drawing is a reproduction of the Original on a reduced scale.*



# PATENT SPECIFICATION



Application Date: July 21, 1928. No. 21,174 / 28.

**320,682**

Complete Accepted: Oct. 21, 1929.

## COMPLETE SPECIFICATION.

### An Improved Device for Securing Telescoping Members together in any Relative Position.

I, HILDE MÜHLBERGER, (Hotel Proprietor's Wife), Hotel Germania, Bad-gastein, Austria, of Austrian nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to a device for securing telescopic tubes together in any desired relative position and consists in the provision of a spring nut on the inner telescoping tube and frictionally engaging the outer tube, said nut being expanded by screwing the inner tube within the nut to cause the nut to be firmly pressed against the inside of the outer tube until the two tubes are firmly secured together. In order to release the nut from the screw-thread upon the inner tube, projections are provided on the inside of the outer tube and engage corresponding notches in the nut threaded upon the inner member.

25 The accompanying drawing illustrates a constructional example of the invention and shows the outer tube in section and the other parts in full.

In order to connect two telescopic tubes A and B, the outer tube A is provided with an internal annular shoulder  $\alpha$  provided with teeth or projections  $\alpha'$ . The inner tube B carries a screw  $b$  at its end and between the tube B and screw  $b$  is a conical portion  $b^1$ . Upon the screw  $b$  is threaded a nut C which has a screw-threaded aperture at one end to fit the screw  $b$  whilst its other end and neck portion is bored out to a greater diameter and slotted to provide spring jaws  $c$  which can be pressed against the outer tube A by the conical portion  $b^1$ . The slits between the jaws  $c$  are enlarged at one end to form notches  $c'$  in which the teeth  $\alpha'$  may engage.

45 If at any place desired the inner tube is turned from left to right, the screw  $b$  will be screwed into the nut C frictionally held by the grip of the tube A on the jaws  $c$  and the conical portion presses the jaws  $c$  more firmly against the inner walls of the outer tube A, whereby the two

tubes are secured together. But by turning the inner tube to the left, the jaws are released so that the inner tube may be 55 pushed freely to and fro.

As it is possible however that, owing to moisture or other causes, the nut gets stuck to the screw and turns with same because of the frictional grip of the jaws  $c$  by the tube A being too small to hold the nut C, a device has been provided such that by entirely pulling out the inner tube, the teeth  $\alpha'$  of the shoulder  $\alpha$  and the notch or gap  $c'$  of the nut are brought to mesh, whereby the nut is safely secured against turning and the screw may be released.

The neck of the nut is designed so as to admit means of lubrication such as greased felt strips for ensuring easy working. Broken or cracked parts are easily replaced by simply screwing same out.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A device for securing an outer tube to an inner member telescoping within the outer tube, comprising a spring nut threaded upon the inner member and frictionally engaging the outer tube, and means whereby said nut is expanded on screwing the inner member within the nut to cause said nut to be firmly pressed against the inside of the outer tube and thereby firmly secure the inner member to the outer tube.

2. A device according to claim 1 having means for releasing the nut from the screw-thread upon the inner member, such as a projection on the inside of the outer tube for engaging a notch in the nut.

3. The improved device for securing two telescoping members together in any desired relative position constructed substantially as herein described with reference to the accompanying drawings.

Dated this 20th day of July, 1928.

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